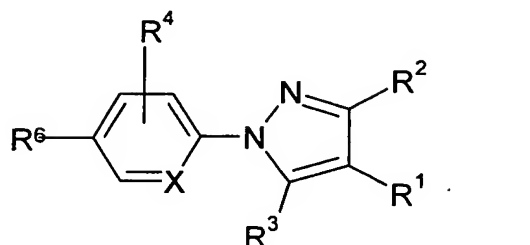


Patent Claims

1. Compounds of the formula I



in which

R^2, R^4 denote H, A, Hal, cycloalkyl having 3 to 7 C atoms, CF_3 , NO_2 , CN, OCF_3 , OA, NHA, NA_2 , NH_2 ,

R^3, R^6 denote $(CH_2)_n$ Het, $(CH_2)_n$ Ar,

R^1 denotes H or an organic radical, in particular $(CH_2)_nCO_2R^5$, $(CH_2)_nCOHet$, CHO, $(CH_2)_nOR^5$, $(CH_2)_n$ Het, $(CH_2)_nN(R^5)_2$, $CH=N-OA$, $CH_2CH=N-OA$, $(CH_2)_nNHOA$, $(CH_2)_n(R^5)Het$, $(CH_2)_nCH=N-Het$, $(CH_2)_nOCOR^5$, $(CH_2)_nN(R^5)CH_2CH_2OR^5$, $(CH_2)_nN(R^5)CH_2CH_2OCF_3$, $(CH_2)_nN(R^5)C(R^5)COOR^5$, $(CH_2)_nN(R^5)CH_2COHet$, $(CH_2)_nN(R^5)CH_2Het$, $(CH_2)_nN(R^5)CH_2CH_2Het$, $(CH_2)_nN(R^5)CH_2CH_2N(R^5)CH_2COOR^5$, $(CH_2)_nN(R^5)CH_2CH_2N(R^5)_2$, $CH=CHCOOR^5$, $CH=CHCH_2NR^5Het$, $CH=CHCH_2N(R^5)_2$, $CH=CHCH_2OR^5$ or $(CH_2)_nN(R^5)Ar$,

R^5 denotes H or A

A denotes straight-chain or branched alkyl or alkoxy having 1 to 10 C atoms, alkenyl or alkenyloxyalkyl having 2 to 10 C atoms,

Het denotes a saturated, unsaturated or aromatic mono- or bicyclic heterocyclic or linear or branched organic radical

containing one or more hetero atoms which is unsubstituted or mono- or polysubstituted by A and/or Hal,

5 Ar denotes a phenyl radical which is unsubstituted or mono- or polysubstituted by A and/or Hal, OR⁵, OOCR⁵, COOR⁵, CON(R⁵)₂, CN, NO₂, NH₂, NHCOR⁵, CF₃ or SO₂CH₃,

n denotes 0, 1, 2, 3, 4 or 5

10 and

Hal denotes F, Cl, Br or I

15 where, in the case that X has the meaning CH, R² and R⁴ do not simultaneously denote H,

and salts and solvates, enantiomers, racemates thereof and other mixtures of the enantiomers, in particular physiologically tolerated salts and solvates thereof.

20

2. Compounds of the formula I according to Claim 1, in which R⁶ denotes phenyl, 2-, 3- or 4-cyanophenyl, 2-, 3- or 4-fluorophenyl, 2-, 3- or 4-methyl-, ethyl-, n-propyl- or n-butylphenyl, 2,3-, 2,4-, 2,5-, 2,6-, 3,4-, 3,5- or 3,6-difluoro-, dichloro- or dicyanophenyl, 3,4,5-trifluorophenyl, 3,4,5-trimethoxy- or triethoxyphenyl, thiophen-2-yl or thio-phen-3-yl.

25

3. Compounds of the formula I according to one or more of the preceding claims, in which R⁴ denotes H, Hal, CN, A or NO₂.

30

4. Compounds of the formula I according to one or more of the preceding claims, in which R² denotes H or alkyl.

35

5. Compounds of the formula I according to one or more of the preceding claims, in which R³ denotes phenyl, 2-, 3- or 4-cyanophenyl, 2-, 3- or 4-fluorophenyl, 2-, 3- or 4-methyl-, ethyl-, n-propyl- or

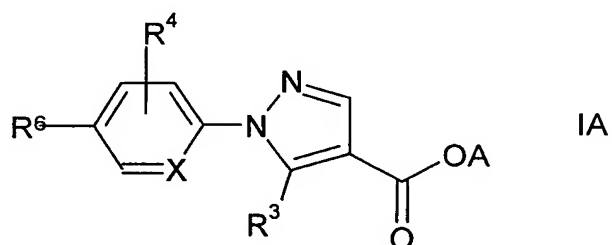
n-butylphenyl, 2,3-, 2,4-, 2,5-, 2,6-difluoro- or dicyanophenyl, thiophen-2-yl or thiophen-3-yl, 2-, 3- or 4-pyridyl, 2-, 4- or 5-oxazolyl, 2-, 4- or 5-thiazolyl, quinolinyl, isoquinolinyl, 2- or 4-pyridazyl, 2-, 4- or 5-pyrimidyl, 2- or 3-pyrazinyl or 2- or 3-furanyl.

5

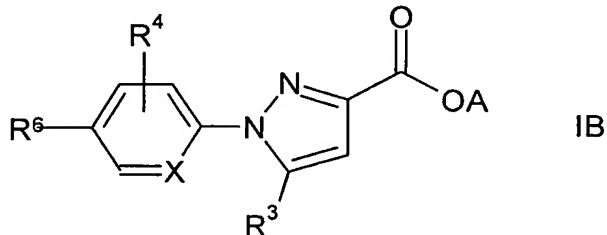
6. Compounds of the formula I according to one or more of the preceding claims, in which X has the meaning N.

7. Compounds of the formulae IA, IB, IC, ID, IE and IF:

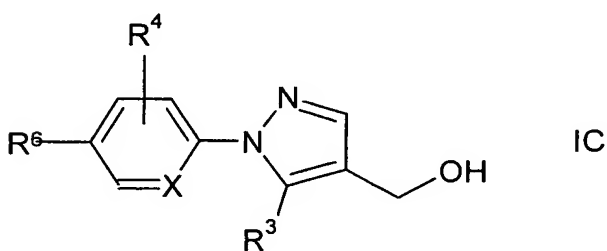
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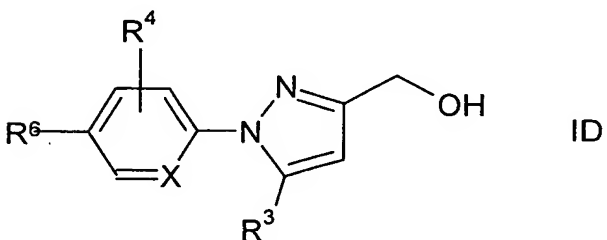
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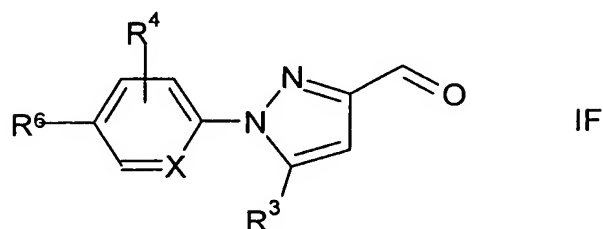
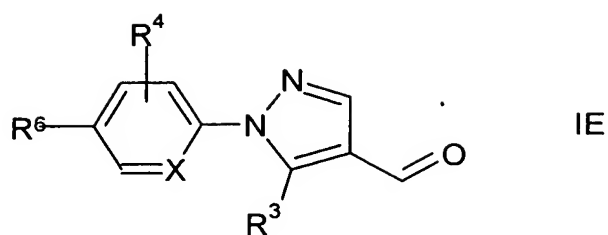


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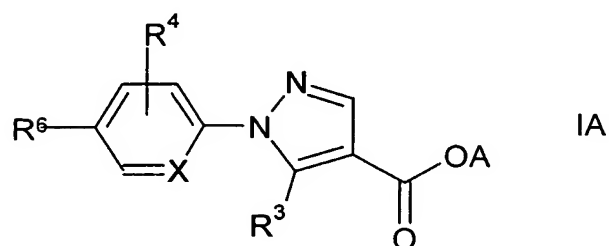
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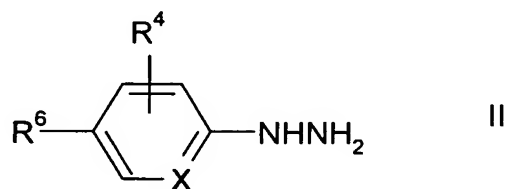
15 in which

R^3 , R^4 , R^6 and X have the meanings indicated in Claim 1.

8. Process for the preparation of compounds of the formula IA



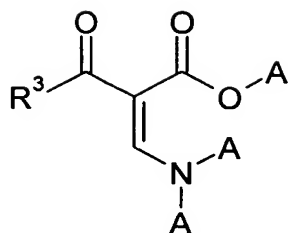
25 in which R^3 , R^4 , R^6 , X and A have the meaning indicated in Claim 1 and salts and solvates thereof, which is characterised in that a compound of the formula II



or acid-addition salts thereof

35 in which

R^4 , R^6 and X have the meanings indicated in Claim 1, is reacted with a compound of the formula III

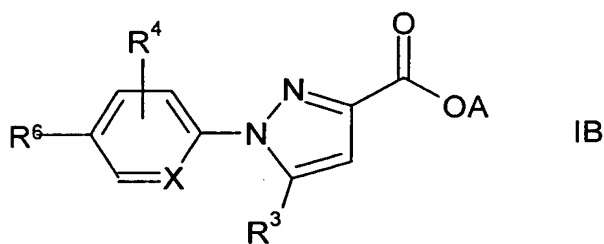


III

in which

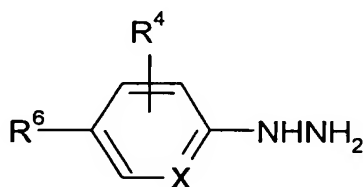
A and R³ have the meanings indicated in Claim 1,
and/or in that a basic compound of the formula IA is converted into
one of its salts by treatment with an acid.

9. Process for the preparation of compounds of the formula IB



IB

in which R³, R⁴, R⁶, X and A have the meaning indicated in Claim 1
and salts and solvates thereof, which is characterised in that a com-
pound of the formula II

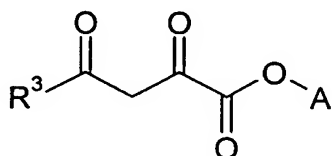


II

or acid-addition salts thereof

in which

R⁴, R⁶ and X have the meanings indicated in Claim 1,
is reacted with a compound of the formula IV



IV

in which

A and R³ have the meanings indicated in Claim 1,
and/or in that a basic compound of the formula IB is converted into
one of its salts by treatment with an acid.

5

10. Compounds of the formula I according to one or more of Claims 1 to 6 and physiologically acceptable salts and solvates thereof as medicaments.

10

11. Use of the compounds of the formula I according to one or more of Claims 1 to 6 , and salts and solvates thereof, for the preparation of a medicament for the treatment and prophylaxis of diseases which can be influenced by the binding of the compounds of the formula I to 5 HT receptors.

15

12. Use of compounds of the formula I according to one or more of Claims 1 to 6 and/or physiologically acceptable salts and solvates thereof for the preparation of a medicament having a 5-HT receptor-antagonistic action.

20

13. Use of compounds of the formula I according to one or more of Claims 1 to 6 and/or physiologically acceptable salts and solvates thereof for the preparation of a medicament having a 5-HT_{2A} receptor-antagonistic action.

25

14. Pharmaceutical composition characterised by a content of at least one compound of the formula I according to one or more of Claims 1 to 6 and/or one of its physiologically acceptable salts and/or one of its solvates.

30

15. Process for the preparation of pharmaceutical compositions, characterised in that a compound of the formula I according to Claim 1 and/or one of its physiological acceptable salts and/or one of its solvates is converted into a suitable dosage form together with at least one solid, liquid or semi-liquid excipient or adjuvant.

35

16. Use of compounds of the formula according to one or more of Claims 1 to 6 and/or physiologically acceptable salts or solvates thereof for the preparation of a medicament for the prophylaxis and/or treatment of psychoses, neurological disorders, amyotrophic lateral sclerosis, eating disorders, such as bulimia, anorexia nervosa, of premenstrual syndrome and/or for positively influencing obsessive-compulsive disorder (OCD).

17. Compounds of the formula I in which Het denotes one of the following radicals:

